

## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION N	O.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/679,883		10/06/2003	Russell J. Wakeman	16441	3831	
4859	75	90 06/16/2005		EXAMINER		
		N SOBANSKI & TO ME PLAZA FOURTH	JACKSON, ANDRE K			
720 WAT			1200K	ART UNIT PAPER NUMBER		
TOLEDO	, OH	43604-1619		2856		
				DATE MAILED: 06/16/200	5	

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary    Application No.   10/679,883   WAKEMAN ET AL     Examiner	,			A·H					
Examiner André K. Jackson  2856		Application No.	Applicant(s)						
André K. Jackson  - The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed and she Sik (9 MONTHS from the mailing date of this communication and she Sik (9 MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply with pit the statutory prior will apply and will expire 35 (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply with pit shall, exame the application to become ASMONDED (5.0, 51 33).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any seared patent ferm adjustment. See 37 CFR 1.704(b).  Status  1) Responsive to communication(s) filed on		10/679,883	WAKEMAN ET AL.						
Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  Extensions of time may be available under the provisions of 37 CFR 1.138(a). In no event, however, may a reply be timely filed safe SIX (6) MONTH'S from the mailing date of this communication. Paging is 10 (6) MONTH'S from the mailing date of this communication. Paging is 10 (6) MONTH'S from the mailing date of this communication. Paging is 10 (6) MONTH'S from the mailing date of this communication. Paging is 10 (6) MONTH'S from the mailing date of this communication. Paging is 10 (6) MONTH'S from the mailing date of this communication. Paging is 10 (6) MONTH'S from the mailing date of this communication, even if timely filed, may reduce any seared patent term adjustment. See 37 CFR 1.704(b).  Status  1)	Office Action Summary	Examiner	Art Unit						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  Extensions of time may be available under the provisions of 37 CFR 1.38(a). In no event, however, may a reply be timely filed safer SIX (6) MONTHS from the mailing date of this communication.  If the period for reply specified above, the maximum statutory minimum of thinty (30) days, will be considered timely.  If NO period for reply is periodical above, the maximum statutory minimum of thinty (30) days, will be considered timely.  If NO period for reply is periodical above, the maximum statutory minimum of thinty (30) days will be considered timely.  If NO period for reply is periodical above, the maximum statutory minimum of thinty (30) days will be considered timely.  If NO period for the plant is period above, the maximum statutory minimum of thinty (30) days will be considered timely.  If NO period to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office islert has three months after the mailing date of this communication, even if timely filed, may reduce any searmed patient term adjustment. See 37 CFR 1.704(b).  Status  Status  1) Responsive to communication(s) filed on									
THE MAILING DATE OF THIS COMMUNICATION.  Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  Failure to reply within the set or extended period for reply will, by statule, cause the application to become ABANDONED (35 U.S.C.§ 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status  1) Responsive to communication(s) filed on		ppears on the cover sheet w	ith the correspondence address -	10					
1) Responsive to communication(s) filed on  2a) This action is FINAL. 2b) This action is non-final.  3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4) Claim(s) 1-20 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5) Claim(s) 10-20 is/are allowed.  6) Claim(s) 1.5 and 6 is/are rejected.  7) Claim(s) 2-4 and 7-9 is/are objected to.  8) Claim(s) are subject to restriction and/or election requirement.  Application Papers  9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).	THE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a relative to reply in the set or extended period for reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the main	N. 1.136(a). In no event, however, may a eply within the statutory minimum of thind will apply and will expire SIX (6) MO ute, cause the application to become A	reply be timely filed  rly (30) days will be considered timely.  NTHS from the mailing date of this communication  BANDONED (35 U.S.C. § 133).	ation.					
2a) ☐ This action is FINAL. 2b) ☑ This action is non-final.  3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4) ☑ Claim(s) 1-20 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.  5) ☑ Claim(s) 10-20 is/are allowed. 6) ☑ Claim(s) 1,5 and 6 is/are rejected. 7) ☑ Claim(s) 2-4 and 7-9 is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement.  Application Papers  9) ☐ The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).	Status								
3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4)  Claim(s) 1-20 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.  5)  Claim(s) 10-20 is/are allowed. 6)  Claim(s) 1,5 and 6 is/are rejected. 7)  Claim(s) 2-4 and 7-9 is/are objected to. 8)  Claim(s) are subject to restriction and/or election requirement.  Application Papers  9)  The specification is objected to by the Examiner.  10)  The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).	1) Responsive to communication(s) filed on	<u></u> .		ļ					
Claim(s) 1-20 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5) □ Claim(s) 10-20 is/are allowed.  6) □ Claim(s) 1.5 and 6 is/are rejected.  7) □ Claim(s) 2-4 and 7-9 is/are objected to.  8) □ Claim(s) are subject to restriction and/or election requirement.  Application Papers  9) □ The specification is objected to by the Examiner.  10) □ The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) □ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) □ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).	2a) ☐ This action is <b>FINAL</b> . 2b) ☑ The	his action is non-final.							
A) Claim(s) 1-20 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5) Claim(s) 10-20 is/are allowed.  6) Claim(s) 1.5 and 6 is/are rejected.  7) Claim(s) 2-4 and 7-9 is/are objected to.  8) Claim(s) are subject to restriction and/or election requirement.  Application Papers  9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).	3) Since this application is in condition for allow	vance except for formal ma	ters, prosecution as to the merit	s is					
4) Claim(s) 1-20 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.  5) Claim(s) 10-20 is/are allowed. 6) Claim(s) 1,5 and 6 is/are rejected. 7) Claim(s) 2-4 and 7-9 is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.  Application Papers  9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).	closed in accordance with the practice under	r <i>Ex parte Quayle</i> , 1935 C.l	D. 11, 453 O.G. 213.	*					
4a) Of the above claim(s) is/are withdrawn from consideration.  5) □ Claim(s) 10-20 is/are allowed.  6) □ Claim(s) 1.5 and 6 is/are rejected.  7) □ Claim(s) 2-4 and 7-9 is/are objected to.  8) □ Claim(s) are subject to restriction and/or election requirement.  Application Papers  9) □ The specification is objected to by the Examiner.  10) □ The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) □ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) □ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).	Disposition of Claims								
7) Claim(s) 2-4 and 7-9 is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.  Application Papers  9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).	4a) Of the above claim(s) is/are withd								
8) Claim(s) are subject to restriction and/or election requirement.  Application Papers  9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).	· _								
Application Papers  9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).	·								
9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).	8)[_] Claim(s) are subject to restriction and	d/or election requirement.	,						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).	Application Papers			,					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).	, _ ,								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).		D)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).		** .	• •						
Priority under 35 U.S.C. § 119  12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).		•							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).	11) I he oath or declaration is objected to by the	Examiner. Note the attache	a Office Action of form P1O-152	<u>′</u> .					
	Priority under 35 U.S.C. § 119								
1. Certified copies of the priority documents have been received.	a) ☐ All b) ☐ Some * c) ☐ None of:		§ 119(a)-(d) or (f).						
2. Certified copies of the priority documents have been received in Application No	<ol><li>Certified copies of the priority docume</li></ol>	ents have been received in	Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage	<ol><li>Copies of the certified copies of the pr</li></ol>	riority documents have bee	n received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).	• •								
* See the attached detailed Office action for a list of the certified copies not received.	* See the attached detailed Office action for a li	ist of the certified copies no	t received.						
		•							
Attachment(s)  1) Notice of References Cited (RTO 802)  1) Interview Summers (RTO 413)		<b>∧</b> □ 1_4 •	Cummon (DTO 442)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date									
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application (PTO-152)  6) Other:	3) X Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0	08) 5) Notice of	Informal Patent Application (PTO-152)						

Application/Control Number: 10/679,883

Art Unit: 2856

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35
 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1,5 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Hufton et al.

Regarding claim 1, Hufton et al. disclose in the patent entitled "Air bubble detector device" a non-conductive sensor body having opposed first and second ends; a conductive first ring positioned within the sensor body, the first ring including a first wall; a conductive second ring positioned within the sensor body and extending concentrically around the first ring, the second ring including a second wall adjacent to and spaced from the first wall to form a first gap, the first and second walls being plates of a first capacitor; and a lubrication flow path formed in the sensor body between the first and second ends and including the first gap (between 36,38), whereby when a lubricating fluid is introduced to the lubrication flow path at the first end, the lubricating fluid flows through the

Art Unit: 2856

first gap to the second end and serves as a dielectric material defining a capacitance value for the first capacitor.

Regarding claim 5, Hufton et al. disclose where the first and second walls each are formed as a plurality of wall segments extending axially and being separated by slots (Figure 2).

Regarding claim 6, Hufton et al. disclose where the first and second walls each are interrupted by a single slot (Figure 2).

- 3. Claims 2,3,4 and 7-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 4. Claims 10-20 are allowed.
- Any inquiry concerning this communication or earlier communications from the examiner should be directed to André K. Jackson whose telephone number is (571) 272-2196. The examiner can normally be reached on Mon.-Thurs. 7AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 10/679,883 Page 4

Art Unit: 2856

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

June 9, 2005

HEZRON WILLIAMS SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2800